



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/729,033	12/04/2003	Chung-Ling Wu	67,200-1183	8859

7590 11/17/2005

TUNG & ASSOCIATES  
Suite 120  
838 W. Long Lake Road  
Blomfield Hills, MI 48302

EXAMINER
----------

HRUSKOCI, PETER A

ART UNIT	PAPER NUMBER
----------	--------------

1724

DATE MAILED: 11/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/729,033	<b>Applicant(s)</b> WU ET AL.	
	<b>Examiner</b> Peter A. Hruskoci	<b>Art Unit</b> 1724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

Art Unit: 1724

The amendment filed 9/22/05 is objected to under 35 U.S.C. 132(a) because it introduces new matter into the disclosure. 35 U.S.C. 132(a) states that no amendment shall introduce new matter into the disclosure of the invention. The added material which is not supported by the original disclosure is as follows: In the amendment to paragraph 0040, "It will be appreciated...coagulant polymer added" lacks clear antecedent basis in the original disclosure and appears to be drawn to new matter.

Applicant is required to cancel the new matter in the reply to this Office Action.

Claims 1-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. In claims 1 and 9 "equipped to add an additive", and in claim in claim 9 "composite particles comprising first and second particles" and "said outlet portion equipped to add a second additive" lack clear antecedent basis in the specification as originally filed, and appear to be drawn to new matter.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In claim 1 "the third particles" lacks clear antecedent basis.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rice 2,640,807 in view of the Admitted Prior Art disclosed on pages 6 and 7 of the instant specification. Rice disclose (see col. 4 line 24 through col. 8 line 2) the structure of the system substantially as claimed. It is submitted that outer shell 90 in settling tank C appears to include the structure of the instant reaction tank, and utilizes reagents or additives to aid in precipitation of a sludge. The claims differ from Rice as applied above by reciting that the system includes a specific holding tank, reaction tank, additives, effluent collection tank, and storage tank. The Admitted Prior Art discloses that it is known in the art of water treatment to include the recited tanks and additives, to aid in controlling the flow of wastewater to a reaction tank, precipitating particles from the wastewaters, and collecting and storing effluent from a clarifier. It would have been obvious to one skilled in the art to modify the system of Rice by including the recited tanks and additives in view of the Admitted Prior Art, to aid in controlling the flow of wastewater to the reaction tank, precipitating particles from the wastewaters, and in collecting and storing effluent from the clarifier. The use of a third collection tank would have been an obvious matter of choice in engineering design to one skilled in the art, depending on the specific wastewater treated and results desired, absent a sufficient showing of unexpected results.

Applicants argue that Rice fails to teach a system for batch treating semiconductor process wastewater as in the disclosed and claimed invention. It is submitted that the type of wastewater treated fails to further limit the structure of the system recited in the instant claims.

Applicants argue that Rice fails to teach the batch reaction tank and clarifier as recited in the instant claims. It is submitted that outer shell 90 in settling tank C appears to include the structure of the instant reaction tank, and utilizes reagents or additives to aid in precipitation of a

Art Unit: 1724

sludge. It is further submitted that the Admitted Prior Art discloses that it is known in the art to add additives to a reaction tank and clarifier to aid in precipitating particles for sedimentation.

Applicants argue that there appears to be no motivation to combine the teachings of Rice and the alleged admitted prior art because the system of Rice works by a different principal of operation than the disclosed prior art. It is submitted that the downcomers and annular overflow portions of Rice are not excluded from the instant claims. Furthermore, applicants have not presented sufficient factual evidence to support the above argument.

Applicants allege that any modifications of the systems of Rice and the admitted prior art, would make both systems unsuitable for their intended purpose. Applicants have not provided sufficient probative evidence to support the above allegation.

Applicants argue that the system of Rice teaches away from the claimed invention by teaching adding additives in the supply lines to the conditioning tanks and by teaching no additive lines in the settling tank. It is noted that the additives recited in the instant claims appear to be drawn to new matter for reasons stated above. Furthermore, it is submitted that the admitted prior art appears to teach the use of polymer additives to the reaction tank and clarifier tank as in the instant invention.

Applicants' citation of case law has been carefully considered but is not deemed pertinent due to the different circumstances involved in the instant application.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**


Art Unit: 1724

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter A. Hruskoci whose telephone number is (571) 272-1160. The examiner can normally be reached on Monday through Friday from 6:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Peter A. Hruskoci  
Primary Examiner  
Art Unit 1724

11/14/05